

Name _____

Exploring the Unique Differences Between Acids and Bases

Open-Ended Response Answer Key

1. Acids taste sour, like lemons or vinegar, while bases taste bitter. Acids do not have a distinct feel, but bases feel slippery to the touch. An example of an acid is lemon juice, while an example of a base is soapy water.
2. In a laboratory, if a strong acid spills, it can be neutralized with a base like baking soda to prevent harm. The steps involve carefully adding the base to the spilled acid, allowing the reaction to occur, and ensuring proper disposal of the resulting saltwater solution.
3. Improper pH balance in a swimming pool can lead to skin and eye irritation for swimmers. It can also corrode pool equipment and reduce the effectiveness of pool sanitizers.
4. In scientific research, bases like sodium hydroxide are used to adjust the pH of solutions. This is crucial in experiments involving chemical reactions and the study of biological processes, ensuring the environment is suitable for the reactions or organisms being studied.

